

## **HSP70 Polyclonal Antibody**

Catalog No: YT5424

**Reactivity:** Human; Rat; Mouse;

**Applications:** IF;WB;IHC;ELISA

Target: HSP70

**Fields:** >>Spliceosome;>>MAPK signaling pathway;>>Protein processing in

endoplasmic reticulum;>>Endocytosis;>>Longevity regulating pathway - multiple

species;>>Antigen processing and presentation;>>Estrogen signaling

pathway;>>Prion disease;>>Legionellosis;>>Toxoplasmosis;>>Measles;>>Lipid

and atherosclerosis

Gene Name: HSPA1A;HSPA1B

**Protein Name:** Heat shock 70 kDa protein 1A/1B

**Human Gene Id:** 3303/3304

**Human Swiss Prot** 

No:

P0DMV8/P0DMV9

Immunogen: Synthesized peptide derived from human HSP70 around the non-acetylation site

of K246.

**Specificity:** HSP70 Polyclonal Antibody detects endogenous levels of HSP70 protein

**Formulation :** Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% sodium azide.

Source: Polyclonal, Rabbit, IgG

**Dilution:** IF 1:50-200 WB 1:500 - 1:2000. IHC: 1:100-1:300. ELISA: 1:20000. Not yet

tested in other applications.

**Purification:** The antibody was affinity-purified from rabbit antiserum by affinity-

chromatography using epitope-specific immunogen.

Concentration: 1 mg/ml

1/3



Storage Stability: -15°C to -25°C/1 year(Do not lower than -25°C)

Observed Band: 70kD

**Cell Pathway :** Spliceosome;MAPK\_ERK\_Growth;MAPK\_G\_Protein;Endocytosis;Antigen

processing and presentation; Prion diseases;

**Background:** This intronless gene encodes a 70kDa heat shock protein which is a member of

the heat shock protein 70 family. In conjuction with other heat shock proteins, this protein stabilizes existing proteins against aggregation and mediates the folding of newly translated proteins in the cytosol and in organelles. It is also involved in the ubiquitin-proteasome pathway through interaction with the AU-rich element RNA-binding protein 1. The gene is located in the major histocompatibility complex class III region, in a cluster with two closely related genes which encode

similar proteins. [provided by RefSeq, Jul 2008],

**Function:** function:In cooperation with other chaperones, Hsp70s stabilize preexistent

proteins against aggregation and mediate the folding of newly translated polypeptides in the cytosol as well as within organelles. These chaperones participate in all these processes through their ability to recognize nonnative conformations of other proteins. They bind extended peptide segments with a net hydrophobic character exposed by polypeptides during translation and membrane translocation, or following stress-induced damage. In case of rotavirus A infection, serves as a post-attachment receptor for the virus to facilitate entry into the cell.,induction:By heat shock.,similarity:Belongs to the heat shock protein 70 family.,subunit:HSPA1B is found in a sperm-specific complex with CATSPER1

and CATSPERB (By similarity). Interacts with TSC2. Interacts with

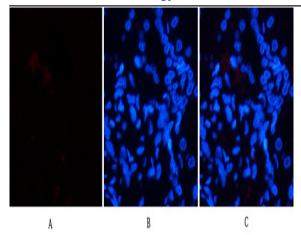
IRAK1BP1.,tissue specificity:HSPA1B is testis-specific

Subcellular Location : Cytoplasm . Nucleus . Cytoplasm, cytoskeleton, microtubule organizing center, centrosome . Secreted . Localized in cytoplasmic mRNP granules containing

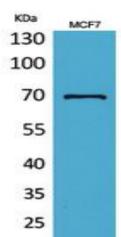
untranslated mRNAs.

**Expression:** Brain, Cajal-Retzius cell, Embryonic kidney, Epithelium, Fetal

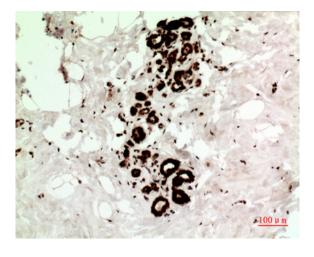
## **Products Images**



Immunofluorescence analysis of human-kidney tissue. 1,HSP70 Polyclonal Antibody(red) was diluted at 1:200(4°C,overnight). 2, Cy3 labled Secondary antibody was diluted at 1:300(room temperature, 50min).3, Picture B: DAPI(blue) 10min. Picture A:Target. Picture B: DAPI. Picture C: merge of A+B



Western Blot analysis of MCF7 cells using HSP70 Polyclonal Antibody. Secondary antibody(catalog#:RS0002) was diluted at 1:20000



Immunohistochemical analysis of paraffin-embedded human-Breast-cancer, antibody was diluted at 1:100